

PATENT ABSTRACTS OF JAPAN

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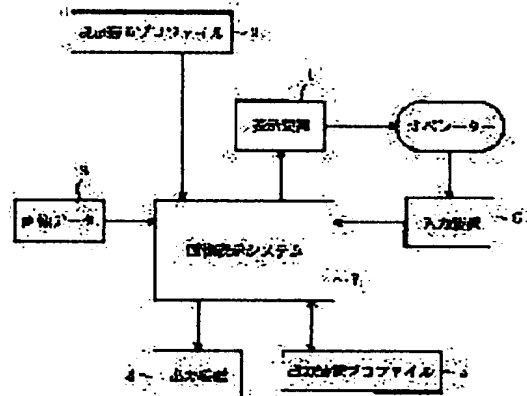
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(54) PRINTER GAMMA CORRECTION METHOD, IMAGE PROCESSING UNIT AND RECORDING MEDIUM

(57)Abstract:

PROBLEM TO BE SOLVED: To conduct gamma correction of a printer on a monitor screen without using a measuring instrument.

SOLUTION: An image display system 7 allows an output device 4 to print out data 3 of a test image and allows a display device 1 to display the data 3 on a monitor. The operator adjusts a color of the monitored image so that the printed-out image is coincident with the monitored image and stores gamma data after color adjustment to an output device profile 5. The test image desirably includes a color mixture pattern generated from ink including C, M, Y colors.



LEGAL STATUS

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JAPANESE

[JP,11-234530,A]

CLAIMS DETAILED DESCRIPTION TECHNICAL FIELD PRIOR ART EFFECT OF THE INVENTION TECHNICAL
PROBLEM MEANS DESCRIPTION OF DRAWINGS DRAWINGS

[Translation done.]

* NOTICES *

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- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] A display means of a color picture A printing means of this color picture A means to process an image It is the printer gamma correction method equipped with the above, and is the method of amending printer gamma of said printing means. Print a test image which consists of two or more colors of N gradation, display this test image on a monitor, and so that a this printed image and an image displayed on a monitor may be in agreement Color adjustment of each color of an image on said monitor is carried out with superposition one by one, and it is characterized by amending printer gamma using parameter value obtained by this color tone ready backward one.

[Claim 2] A printer gamma correction method according to claim 1 characterized by including a color mixture pattern generated from ink containing C color, M color, and Y color as said test image.

[Claim 3] A printer gamma correction method according to claim 1 characterized by using a pattern on which it put one color of ink except K color at a time as said test image.

[Claim 4] A printer gamma correction method according to claim 1 characterized by using a monochrome pattern for said ink into said test image when K color or spot ink is included as ink of said printing means.

[Claim 5] Said test image is the printer gamma correction method according to claim 1 characterized by being the image which carried out adaptive allocation of the number of gradation to a portion with large rate of change of a standard gamma curve set up beforehand.

[Claim 6] Said test image is the printer gamma correction method according to claim 1 characterized by being the image which carried out adaptive allocation of the number of gradation to a portion with large rate of change of a gamma curve which corrected at the end.

[Claim 7] An object of said color adjustment is the printer gamma correction method according to claim 1 characterized by being each color component value which constitutes an image on said monitor.

[Claim 8] An object of said color adjustment is the printer gamma correction method according to claim 1 characterized by being the preview gamma value of said printing means.

[Claim 9] A printer gamma correction method according to claim 1 characterized by adjusting the whole tone when brightness of an image on all color tone ready backward one and said monitor and a printed image is not in agreement.

[Claim 10] A printer gamma correction method according to claim 1 characterized by amending printer gamma by adjusting offset of a gamma curve corrected to a standard gamma curve or the last set up beforehand using said adjusted parameter value.

[Claim 11] A printer gamma correction method according to claim 1 characterized by making said amended printer gamma reflect in gamma data which said image-processing means holds.

[Claim 12] A printer gamma correction method according to claim 1 characterized by making said amended printer gamma reflect in gamma data which said printing means holds.

[Claim 13] An image processing system characterized by providing the following. A means to print a test image which consists of two or more colors of N gradation A means which stored printer gamma data of this printing means A means to display said test image A means which is made to pile up each color of said displayed image mutually one by one, and carries out color adjustment so that an image displayed as said printed image may be in agreement, and a means to amend said printer gamma data based on parameter value obtained by this color tone ready backward one

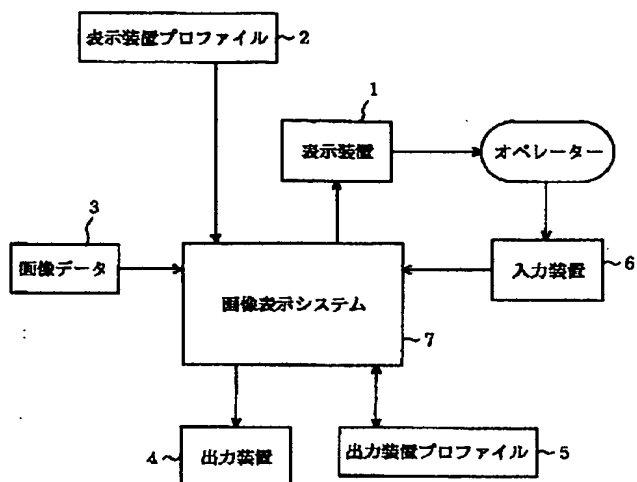
[Claim 14] An image processing system characterized by providing the following. A means to print a test image which consists of two or more colors of N gradation A means which stored printer gamma data of this printing means A means which stored preview gamma data of this printing means A means which is made to pile up each color of said displayed image mutually one by one, and carries out color adjustment so that a means to display

said test image, and an image displayed as said printed image may be in agreement, and a means to amend said printer gamma data and preview gamma data based on parameter value obtained by this color tone ready backward one

[Claim 15] An image processing system characterized by providing the following. A means to print a test image which consists of two or more colors of N gradation A means which stored printer gamma data of this printing means A means which stored preview gamma data of this printing means A means to adjust each color component value which constitutes said displayed image so that a means to display said test image, and an image displayed as said printed image may be in agreement, and a means to amend said printer gamma data and preview gamma data based on each this adjusted color component value

[Claim 16] An image processing system equipped with a display means of a color picture characterized by providing the following, a printing means of this color picture, and a means to process an image 1st means to amend and output image data inputted into said printing means according to a printer gamma curve from said image-processing means 2nd means to amend and output image data outputted to said image-processing means or a display means according to a preview gamma curve from said printing means An image when printing a test image which consists of two or more colors of N gradation A means generate a preview gamma curve in case an image when displaying this test image is in agreement, a means generate a printer gamma curve based on a this generated preview gamma curve, a means save said generated preview gamma curve for said 2nd means, and a means save said generated printer gamma curve for said 1st means

[Claim 17] So that a function which prints a test image which consists of two or more colors of N gradation, a function to store printer gamma data for this printing, a function which displays said test image, and an image displayed as said printed image may be in agreement A record medium which recorded a program for making a computer realize a function which is made to pile up each color of said displayed image mutually one by one, and carries out color adjustment, and a function which amends said printer gamma data based on parameter value obtained by this color tone ready backward one and in which computer reading is possible.



[Translation done.]